

L.—*Note on the Relation of the Land-Mollusca of Tasmania and of New Zealand.* By G. HEDLEY, F.L.S.

THE number of this Magazine for January last contained an article in which my friend Mr. Suter discusses the relation between (*inter alia*) the snails of New Zealand and of Tasmania, concluding that they are closely allied. While assenting to the statements made in the body of the paper, from this deduction I must differ.

We are told that *Rhytida*, *Rheneca*, *Paryphanta*, *Luoma*, *Flammulina*, and *Endodonta* are common to either fauna. To these may be added *Helicarion*; and the interesting fossil *Rhytida Simsoniana*, Johnston (Proc. Roy. Soc. Tasmania, 1880, p. 24), a near ally of *R. Dunnica*, Gray, may be quoted to reinforce the argument.

But to grasp the situation the whole fauna must be reviewed; and in doing so we find that, on the one hand, Tasmania contains, besides the above genera, *Liparus*, *Caryodes*, *Anoglypta*, *Cystopelta*, *Pupa*, and *Succinea*, while, on the other, New Zealand possesses *Placostylus*, *Schizoglossa*, *Otococoncha*, *Tornatellina*, *Athoracophorus*, and the operculates *Lagocheilus*, *Realia*, and *Hydrocena*.

The fact that Tasmania possesses no real land-operculates, the *Truncatella* included in Tasmanian lists being more a marine than a terrestrial animal, alone constitutes a profound gulf between the faunas. The widespread *Succinea* and *Pupa* have reached Tasmania from a source that did not communicate with New Zealand, while the reverse is true of *Tornatellina*.

Examining the common element we note that this includes about half the genera of each country, that all these range beyond, and some far beyond, the two countries, and that this element is chiefly composed of the smallest shells. Of all, *Paryphanta* has the most limited range, extending to Victoria (*atramentaria*); this genus is, however, vaguely defined, and its characters require a definition which may alter the supposed geographical range: *Rheneca* extends to Queensland (*splendidula*) and to New Caledonia (*lutcolina*); *Rhytida* to British New Guinea (*globosa*) and to the Solomons (*Villandrei*); *Luoma* to South Australia (*pictilis*); *Flammulina*, or something very like it, is shown by Mr. Suter to reach Africa (*Pella Burnupi*); *Endodonta* ranges to the Philippines and to the Society Islands, and *Helicarion* through Malaysia and India to Africa.

Just as the fluviatile shells possess a wider range and inferentially greater powers of dispersal than terrestrial mollusks, so do minute land-shells gain more extended limits than bulkier forms. If a collection of Tasmanian or New-Zealand shells were put into a sieve, the shells that passed the meshes would roughly represent those with a wide range, and the shells retained those with a restricted one. That none of the larger, but all the smaller, species of Fiji (continental islands) are represented in Samoa (oceanic) is a significant illustration which may explain how the micro-snail faunas of Tasmania and New Zealand are, as Mr. Suter says, so closely allied, while the macro-snail faunas repudiate any relationship.

*Conclusion.*—None of the species and about half the genera of their respective land-molluscan faunas are common to Tasmania and New Zealand; this community does not embrace the Streptoneura. The common element for the most part is represented by minute species and widespread genera, and does not necessarily imply former direct land communication. As a whole the two faunas are wider apart than those of Britain and the Atlantic States of North America.

Sydney,  
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LI.—*A new Pedunculate Cirripede.*

By the Rev. THOMAS R. R. STEBBING, M.A.

[Plate XV.]

TRICHELASPIS, gen. nov.

Valves five; the scuta trifid; the carina terminating in a fork at its base. The mandibles with five or six teeth; the first maxillæ very slightly notched. In each cirrus the two rami are subequal. The caudal appendages are one-jointed, spinose.

The name of the genus is derived from *τρίχηλος*, cloven in three, and *ἀσπίς*, a shield. The characters are but little removed from those of *Dichelaspis*; but since that name was chosen by Darwin to displace the earlier names *Octolasmis* and *Heptolasmis*, on the ground that those titles conveyed a false impression, it seems impossible to retain *Dichelaspis*, meaning a bifid scutum, for a species in which the scutum is very conspicuously trifid.